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JACS South Asia. Sustainable development in marginal regions of South Asia

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8 JACS South Asia

Sustainable Development in Marginal Regions of South Asia

Ulrike Müller-Böker

with the support of

Danilo Geiger, Urs Geiser, Vidya Kansakar,
Michael Kollmair, Kate Molesworth and Abid Suleri*

Fig. 1

The valley of Swat
in North West
Pakistan.

Photo: U. Geiser

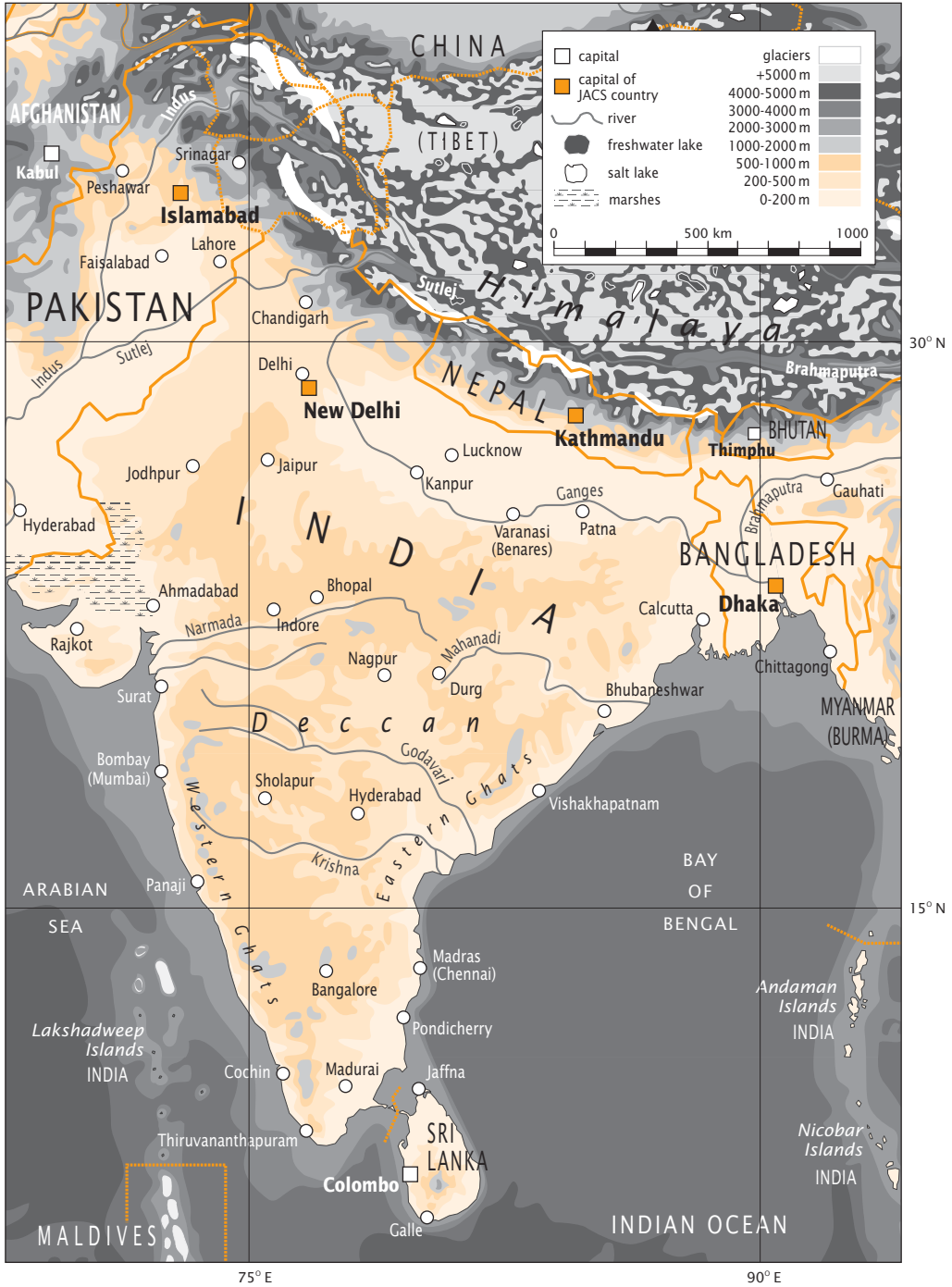


* This report is partly based on the minutes of a workshop held in Kathmandu, August 2001
(participants are listed in Annex 1, p. 450)

Abstract

The population of the South Asian subcontinent includes 500 million people who subsist on less than one dollar a day and together make up 40% of the world's poor. In a workshop, participants from Bangladesh, India, Pakistan and Nepal, among them scientists as well as NGO representatives, joined together to determine the focus of NCCR North-South research activities in South Asia. The consensus was that core problems associated with syndromes of global change are most acute in marginal regions and among marginalised people. As many of South Asia's marginal areas are mountainous, problem clusters were considered to be specific to the "highland-lowland" syndrome context. It was concluded that within the JACS South Asia there is a need for research on the impact of global change upon marginal areas and within both the "highland-lowland" and the "urban-peri-urban" syndrome contexts as defined by the NCCR. Research will therefore be focused upon marginal or fragile mountain areas (i.e. those at risk due to climatic or environmental conditions in addition to their economic situation). In selected case study localities, rural livelihood strategies will be analysed to identify key factors impacting upon sustainable development. Institutions and policies that shape important processes like natural resource use, migration and rural development will form the focus of analyses.

Fig. 2: Overview of South Asia. The main partner institutions of the NCCR North-South are located in the capitals of Bangladesh, India, Nepal and Pakistan, and in the Indian cities of Gauhati and Thiruvananthapuram.



8.1 South Asia: an introduction to the subcontinent

8.1.1 Definition of the region

The region of South Asia is defined differently by different organisations and authors. The South Asian Association for Regional Cooperation (SAARC) consists of Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka; other authors, for example Nohlen and Nuscheler (1994) also include Myanmar. For operational purposes, the JACS South Asia consists of countries in which our programme is currently active, namely Pakistan, Nepal, India and Bangladesh (Fig. 2).

8.1.2 First glimpses

South Asia is a subcontinent of great contrasts and extremes. The region is made up of a broad diversity of ecosystems ranging from deserts to areas in Assam with some of the highest annual rainfall records in the world. The region incorporates the highest mountain on Earth and is home to some of the world's greatest cultures and civilisations that share many cultural, social, historical and religious traditions. While only 1 % of the gross capital market flows to developing countries reaches South Asia (World Bank, 2000), in recent years, the collective South Asian economy has become one of the fastest growing in the world, with an average GDP growth rate of 5.4 % in 1999 (World Bank, 2000).

South Asia is also home to 40 % of the world's poor, with 500 million people living on less than one dollar a day (World Bank, 2000). There is a wide disparity between the economic status of the region's various countries, the differential between the economies of Nepal and India being a case in point. Nepal, one of the region's poorest nations, is reported to have a GDP per capita of USD 1,237. Those of Bhutan, Bangladesh and Pakistan range from USD 1,341 to 1,834, and all four nations exhibit low Human Development indices (UNDP, 2001). The Maldives, Sri Lanka and India have much higher annual GDP per capita of USD 4,423, 3,279 and 2,248 respectively. If one compares these figures with the world average of USD 6,980 it becomes evident that the majority of South Asian countries are very poor.

Politically, South Asia is facing many critical tensions both between countries (such as the ongoing conflict between India and Pakistan) and within coun-

tries (e.g. civil war in Sri Lanka; Maoist insurgency in Nepal; tribal insurrection in North East India and Bangladesh). While political discord has wide-ranging implications for the region as a whole, the impact of shocks associated with conflict is strongest in the marginal regions of South Asia.

8.1.3 General statistics

Table 1 provides some key data for the countries involved in our operational programme, including indices of health and of social and economic development:

Table 1

	Year	Bangladesh	India	Nepal	Pakistan
Geography and social indicators					
Surface (thousand sq. km)	2000	144	3 287	147	796
Total population (million)	2000	137.4	1 008.9	23	141.3
Annual population growth rate (%)	1990–2000	1.6	1.8	2.4	2.5
Urban population (% of total population)	2000	25	28	12	37
Annual urban growth rate (%)	1990–1995	5	2.9	7.5	4.7
Development and economic indicators					
GDP per capita, at purchasing power parities (USD)	2000	1602	2 358	1327	1928
HDI rank (total 173)	2002	145	124	142	138
Human Poverty Index (% of population below poverty line)	1989–2000	35.6	35	42	34
Population in agriculture male / female (% of labour force)	1998–2000	–	–	–	–
Public expenditure on education / health (% of total public expenditure)	1995–1997 / 1998	2.2 / 1.7	3.2 / –	3.2 / 1.3	2.7 / 0.7
Population with access to safe water / adequate sanitation (%)	2000	97 / 53	88 / 31	81 / 27	88 / 61
Environmental indicators					
Crop land per capita (hectares)	1997–1999	0.06	0.17	0.13	0.16
Area of severe soil degradation (% of country)	2000	27	59	27	24
Protected area (% of total surface)	1999	0.8	4.8	7.8	4.8
Energy consumption per capita (kilogram of oil equivalent)	1999	139	482	358	444

Some key indicators for the countries of the JACS South Asia.

Sources:
UNDP, 2002;
World Bank,
2002a+b;
FAO, 2000

Although evidence from both macro-level and micro-level research indicates that South Asia has entered the early stages of fertility transition, there is also evidence suggesting that the region's population will continue to grow rapidly for another century (Sathar and Phillips, 2001). Placed within the global context, the total fertility rate (TFR) of South Asia is high. While the TFR of the world averages below 3 and that of East Africa is approaching replacement level, the South Asia region exhibits a TFR exceeding 4 (UNFPA, 1989). As illustrated in Table 1, there is a pronounced variation between countries in demographic profile, reflecting differences in the pace of fertility transition and the rate of population growth, together with differential rates of onset of mortality decline (Dyson, 2001).



Fig. 3
A general over-
view of population
densities in South
Asia.

Source:
http://www.grida.no/cgiar/images/sc_popd.gif

As Fig. 3 illustrates, population distribution is also linked to natural conditions. Densely populated areas (illustrated by greater colour intensity on the map) closely correspond with environmental features such as alluvial, well-irrigated plains and coastal areas. Populations are more thinly distributed (paler areas of Fig. 3) in less hospitable mountains and deserts.

8.2 Selection of “syndrome contexts” and their core problems and opportunities

8.2.1 General problems and opportunities for sustainable development in South Asia

At the beginning of the Kathmandu workshop, participants brainstormed their perceptions of key problems and opportunities regarding sustainable development in South Asia. These perceptions focused on the role of the state and negative impacts of development interventions. Opportunities for sustainable development were recognised in the potential to increase participation and empowerment of civil society and of women and marginalised groups in particular. The effects of economic processes associated with cultural erosion, such as neo-liberalisation, were perceived to be counterbalanced by opportunities to strengthen autonomy and free access to markets. New information technologies were considered to offer a potentially wide range of opportunities. Table 2 shows the group’s consensus with regard to core issues. The table also highlights the fact that many issues can be either problems or opportunities, depending on the way they are addressed.

8.2.2 Selection of syndrome contexts

In the course of the South Asia workshop, consensus was reached on a central theme: that core problems associated with syndromes of **global change** are most acute in **marginal regions** and among **marginalised people**. (The notion of global change is used to include both environmental global change and economic, socio-political and cultural globalisation.) The term “marginal regions” incorporates a complex interplay of factors. Generally, it refers to areas that are partially or completely isolated from the mainstream of development. Spatially, marginal regions may be peripheral areas characterised by adverse physical conditions, where key considerations include distance from major centres of innovation and service facilities. At the same time, however, marginal areas exist within the urban context, as in the case of urban slums, where proximity to services is rendered invalid.

The workshop participants then tested all problems and opportunities identified in South Asia (Table 2) for their relevance within the so-called syndrome contexts of specific regions in which the NCCR proposes to undertake future research. This NCCR proposal was intensively discussed and its pros and cons documented (see Minutes of the International Workshop,

2001). During this discussion, the notion of “fragility” was introduced as an alternative to “syndrome context” in order to initiate a debate on more adequate and innovative regionalisation of the South Asian space. One group of participants were of the opinion that research should focus on people, most importantly, indigenous people, rather than on specific geographical areas. This concept was based on the argument that indigenous people throughout South Asia might be considered marginalised. In terms of the definition of “syndrome context”, the term “tribal area” – a spatial category – suggests a boundedness of areas of habitation which in practice does not exist on the

Table 2

List of core problems and opportunities in South Asia.	Scientific realms	Problems	Opportunities
	Political & institutional	Shrinking role of the state; lack of coordination (between sectors and levels); lack of capacity for implementation; unplanned debts and pressure from international lenders; unequal participation in decision-making; non-participatory approach; adoption of inappropriate technology/ development model; erosion of indigenous institutions and knowledge	Participatory mobilisation; political awareness; role of civil societies; institutional capacity building; regional cooperation
	Socio-cultural & economic	Intolerance towards ethnic and cultural diversity; “coca-colaisation”; changing consumption and production patterns; tourism; privatisation and commercialisation; growing inequality and imbalance; commercial plantations; trade liberalisation through WTO; multilateral/bilateral trade agreements; health patenting; bio-piracy and piracy of indigenous knowledge	Cultural interaction; autonomy of users/producers; markets for traditional commodities; market access; opportunities (jobs, income) through trade and tourism; migration
	Population & livelihoods	Population growth; migration/relocation; illiteracy; gender inequity; livelihood sustainability at stake; urbanisation and urban slums	Education and empowerment; gender equity
	Infrastructure & information	Absence of access to infrastructure services; unequal flow of information	Access to information (minority rights, human rights); networking; information exchange using new IT
	Bio-physical & ecological	Land degradation and natural disasters; unequal distribution of resources	Conservation and development; preservation of biodiversity

Indian subcontinent. Very often nowadays, “tribal” communities in mountain regions, semi-arid areas and urban and peri-urban contexts live interspersed with communities representing locally or nationally dominant populations.

Keeping in mind the views of many participants on problems associated with the syndrome concept, we concentrated on the identification of core problems within one main syndrome context, i.e. **highlands and their interactions with lowlands**. Mountain areas are linked with urban and peri-urban areas by migration and other processes (including the livelihoods of indigenous people), and cities are situated in both mountains and plains. Therefore, the urban and peri-urban syndrome context was added. Three working groups were formed according to the main research interests and problem perceptions of the workshop participants, who belonged to various scientific disciplines and NGOs. Table 3 indicates the three groups, each of which had its own special perspective on the highland/lowland syndrome context.

Table 3

	Marginal area group (Nepal, Pakistan)	Fragile area group (Kerala, Pakistan)	Indigenous people group (NE India, Bangladesh)	Syndrome contexts and focus of working groups.
Highland-lowland areas	xxx	xxx	xxx	
Urban and peri-urban areas	x	x	x	

8.2.3 Core problems and opportunities identified by the three groups

The core problems and opportunities identified by the three working groups are detailed in Tables 4, 5 and 6 and consolidated in Table 7.

Marginality in mountain areas (including relations to lowlands):

The mountains of South Asia are characterised by diversity in size, altitude and physiography, and also in the ethnic and cultural diversity of their inhabitants. Mountain areas are not necessarily always marginal areas. Indeed, Nepal’s main economic and tourism centres of Kathmandu and Pokhara are situated in the mountains. It is therefore clearly more appropriate to focus upon marginal areas within mountains, rather than upon mountains *per se*.

Table 4

List of problems and opportunities: marginality in mountain areas in relation to low-lands.	Scientific realms	Problems	Opportunities
	Political & institutional	Lack of effective government support – implementation, coordination, efficiency. Unequal participation in decision-making. Erosion of indigenous knowledge and institutions.	Strengthening civil societies. Strengthening local institutions. Minority and human rights. Political awareness.
	Socio-cultural & economic	Intolerance of ethnic and cultural diversity – lack of understanding and respect. Tourism.	Market access. Tourism (regulated). Regional interactions and influences. Conservation input/output sharing. Food security.
	Population & livelihoods	Population growth – pressure on resource base. Migration and relocation – immigration and emigration. Options for sustainable livelihoods threatened – resource base – short-term vs. long-term gains.	Education and empowerment (gender issues). Temporary migration and new job opportunities.
	Infrastructure & information	Unequal access to infrastructure services – information, education, health, transport.	
	Bio-physical & ecological	Degradation of natural resources and increasing vulnerability.	Conservation and development. Preservation of biodiversity.

Indigenous people in mountain areas (in relation to lowlands):

This working group shared a widely-quoted definition of “indigenous peoples” (registered in UN Document No. E/CN.4/Sub 2/1986/7): “Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of societies now prevailing in those territories or parts of them. They form at present a non-dominant sector of society and are determined to preserve, develop and transmit to future generations their ancestral territories and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems.”

Table 5

Scientific realms	Problems	Opportunities	List of problems and opportunities: indigenous people in mountain areas in relation to lowlands.
Political & institutional	Governance – denial of self-determination and self-governance. Erosion of indigenous institutions and knowledge.	Minority and human rights. Participatory mobilisation. Institution-building.	
Socio-cultural & economic	Intolerance of ethnic and cultural diversity. Privatisation and marketisation – privatisation of commons – commercial plantations – marketisation of land – land alienation. Unequal distribution of resources – economic input.	Regional cooperation. Employment opportunities. Markets for traditional commodities.	
Population & livelihoods	Gender inequity – inheritance – political representation – economic acknowledgement. Livelihood sustainability at stake. Migration and relocation – land alienation – social/ethnic conflicts – militarisation – exploitation.	Gender equality. Education and empowerment.	
Infrastructure & information	Unequal distribution of resources – health / education / sanitation – absence of access to infrastructure services. Unequal flow of information.	Access to information.	
Bio-physical & ecological	Land degradation and natural disasters – monoculture – settlers – militarisation – overgrazing and over-cropping by settlers.	Biodiversity.	

Fragile areas in mountain areas (in relation to lowlands):

Fragile areas are defined as areas at risk with regard to climatic or environmental conditions; however, certain areas are also economically fragile. One shared feature of fragile areas is that development processes in these areas are not sustainable and that they are highly vulnerable.

Table 6

List of problems
and opportunities:
fragility in moun-
tain areas in rela-
tion to lowlands.

Scientific realms	Problems	Opportunities
Political & institutional	Withdrawal of state interventions from develop- ment and welfare programmes, but not from bureaucratic set-up. Weakening of the nation-state particularly in developing countries.	Institution-building. Participatory mobilisation. Decentralisation.
Socio-cultural & economic	Privatisation, marketisation, commercialisation – absence of appropriate regulatory mechanisms – international trade agreements and their implications.	Opportunities relat- ed to market access – investment due to cheap labour – export of tradition- al commodities – niche markets.
Population & livelihoods	Population growth and redistribution – demographic distortions. Livelihood sustainability at stake. Inequality and imbalances – access to resources and to livelihood opportunities. Gender dimension – increasing feminisation of work deprivation. Migration, relocation – migration and its implications – unskilled labour – increased vulnerability of family members.	Migration.
Infrastructure & information	Access to social and economic infrastructure services – declining access to public services, health, education, food, roads, electric power etc. due to different state policies. Unequal flow of and access to information – digital divide, denial of right to information.	Access to information – global networks.
Bio-physical & ecological	Resource degradation (land, water, forest, com- mon property resources). Cropping pattern imbalances / food insecurity – limited choices – mono-cropping, commercial plantations – imbalance in cereal production.	Integrated manage- ment and conserva- tion of natural resources. Conservation of indigenous knowledge and biodiversity.

8.2.4 Consolidated list of core problems and opportunities and the identified research priorities

After thorough discussion in the three working groups with their respective focuses, the workshop moderators consolidated the three lists of core problems and opportunities into one. This exercise showed that several of the problems and opportunities appeared in all the contexts (see Table 7).

Among the themes that emerged from the workshop, the following cross-cutting issues are important to the NCCR as a whole:

- Livelihood complexity
- Decentralisation and natural resource management
- Role of state versus non-state institutions
- Conflicts between indigenous peoples and settlers
- Gender dimension of institution and livelihood issues.

Table 7

Scientific realms	Focuses		Consolidated list of core problems and opportunities
Political & institutional	Interventions and institutions	Role of state and civil society – withdrawal of state interventions from development and welfare programmes – relevance of the nation/state. Governance – governance problems (coordination, implementation) – self-determination and self-governance – effective government support. Education and empowerment. Strengthening of local institutions. Participatory mobilisation, decentralisation. Indigenous knowledge and institutions.	– research priorities.
Socio-cultural & economic	Market access Regional interactions and influences	Investment due to cheap labour. Export of traditional commodities. Niche markets. Employment opportunities. Regional networks and exchange of knowledge.	
Population & livelihoods	Livelihood sustainability at stake	Unequal access to resources and services to strengthen livelihood opportunities – health, education, power, food, infrastructure. Gender dimension – feminisation of work deprivation. Migration – vulnerability of family members – social and ethnic conflicts.	
Infrastructure & information	Flow of and access to information	Global networks. New IT possibilities.	
Bio-physical & ecological	Ecological sustainability	Resource degradation – land, water, forest. Cropping pattern imbalances and food insecurity – declining productivity in cereal production.	

8.3 Status and dynamics of core problems and opportunities in South Asia

In this chapter, the status and dynamics of core problems and opportunities identified in Chapter 2 are considered. The workshop participants underlined the **importance of addressing both problems and opportunities** simultaneously. Many aspects of globalisation can have both negative and positive impacts on people's livelihoods. When research focuses only on the problems associated with global change, it runs the risk of overlooking potential opportunities and the use people make of resources presented by globalisation (Backhaus, 1999).

Below, the arguments raised by workshop participants are clustered according to Table 7 in Chapter 2.

8.3.1 Political and institutional realm

Weakening of nation/state, withdrawal of state

The processes of global change have weakened some South Asian countries' capacity to influence international decision-making and to effectively manage their own economies and invest in human and social capital. The states have reduced their responsibilities towards social welfare, detrimentally affecting marginal people whose negotiating power within society is poor (Drèze and Sen, 1995).

Denial of self-determination and self-governance

Although South Asia, having gained independence from colonial rule and reducing feudal authority, is evolving democracies, marginalised people and those living in marginal regions often remain unrepresented. Little effort has been made toward integrating marginalised groups and giving them a voice in the political and economic mainstream. In many cases, governments have over-exploited natural resources they depend on (e.g. in the forest sector, conservation programmes, resettlement programmes).

Unequal participation in decision-making

Local people tend to be excluded from development-related decision-making processes. Although South Asian governments are beginning to involve local people in development planning processes (e.g. with the introduction of the Local Governance Act of Nepal or Panchayati Raj in India), margin-

alised groups remain excluded due to the persistence of social inequalities, such as widespread illiteracy, poverty and the caste system. Even where a “bottom-up” approach is apparent, social exclusion remains evident in the lack of women participating in local development-related decision-making processes (Geiser, 2001a).

Lack of effective government support

Poor marginal regions, such as some mountain areas of South Asia, are characterised by limited resources and high costs of development of basic infrastructure. Without effective government support, possibilities remain limited for the disadvantaged to improve their economic and social status. Some government programmes have failed due to politicisation of development activities at both the local and national levels. Poor management and lack of transparency, monitoring and accountability combine to obstruct sustainable development of marginal regions (Santhakumar, 1997).

Strengthening local institutions and civil societies

In order to exploit the positive development potentials presented by global change and offset – i.e. mitigate – negative impacts, institution-building must be supported to encourage a decentralised, inclusive, participatory approach. The success of community forestry projects in Nepal has illustrated the efficacy of such processes. By strengthening institutions at the local level, traditional skills, knowledge and technologies in the management of natural resources, services, economic infrastructures and institutions might be revived (Ostrom, 1990; Geiser, 2001a,b). This way the potential of marginal regions can be harnessed and resources optimised.

Civil society groups (Manor et al., 1999) such as non-governmental and voluntary organisations provide the momentum and capacity to manage and organise development at the community level. They present a vehicle by which development might be brought to respond to the needs of diverse groups within South Asian societies.

The vulnerable situation of indigenous and marginalised groups can also be offset by regional cooperation. In North East India, local-level political parties have recently joined together to form a common platform for shared interests. Cooperation between smaller groups of marginalised peoples enables them to exert a certain power within the mainstream of society (Manor, 1999; Thomas Isaac and Franke, 2000; Khan, 2000).



Fig. 4
People in
Kerala demand
their rights.
Photo: U. Geiser

8.3.2 Socio-cultural and economic realm

Lack of ethnic and cultural tolerance

South Asian countries share the common challenge of building a nation out of multiple cultural identities. Invariably, nation-building is based on the culture of dominant groups and religions, at the expense of other cultures within the society as a whole (Pfaff-Czarnecka, 1997).

Erosion of indigenous knowledge and institutions

Global change brings about an influx of novel concepts and information and creates new needs and opportunities that often cause devaluation of indigenous knowledge and institutions (Bodley, 1990). The powerful discourse of elitist science, technical expertise and perceived educational and cultural superiority overwhelms that of indigenous and marginalised populations (Müller-Böker, 1991; Gadgil and Guha, 1995; Agrawal, 1995; Kollmair, 1999; Geiser, 2002).

Privatisation and marketisation of land

Privatisation of common property resources (CPR) is an inevitable outcome of globalisation, which drives the processes of marketisation and privatisation. As a consequence, many previously common lands, forests and water bodies that traditionally formed the basis of livelihoods of local groups in rural areas have become the private property of individuals and corporate bodies. The consequential limitation of access of local people to natural resources threatens the welfare of communities depending on natural resources, as well as natural resources themselves (Suleri, 2001).

Market access and marketing of traditional commodities

One of the positive features of globalisation is investment in marginal areas. Many multi-national companies outsource their manufacturing to the South Asian region because labour is cheaper there than in Europe or America.

Market towns in marginal regions have the potential to stimulate local production via existing institutions that might facilitate the marketing and distribution of farm inputs and produce. Moreover, they might be supported to become effective centres for rural development activities and dissemination of information to the local population. Due to the remoteness of many rural communities in South Asia, many of the commodities they traditionally produce fail to reach major markets or achieve prices relative to the time and energy invested in them. Formation of production and marketing cooperatives, however, has emerged as an effective way of marketing the commodities of local people both at the national and international levels (Fisher et al., 1997).

Tourism

In the absence of integrated national development strategies, the economic potential of tourism remains unrealised and the negative impacts of seasonal concentrations of outsiders within certain locations are amplified (Nepal et al., 2002). In this way, tourism may contribute to the erosion of local cultural values, social systems and institutions, in addition to compounding environmental degradation, littering and pollution. In marginal areas such as mountains, the vulnerability of local people becomes intensified. Especially along mountaineering and trekking routes, tourism has been linked to deforestation, reduction in biodiversity and pollution of water, land and air. Unplanned growth of settlements, roads and other civil amenities also has a negative impact on the visual quality of landscape, which is often the central asset of tourism development. Experience has shown that the bulk of income

generated by tourism in mountain areas is not retained locally and does not contribute to developing the livelihoods of marginal populations. The potential for tourism development is one advantage that mountain regions have over lowland areas. Tourism provides opportunities for the development of remote and resource-poor mountain communities, without the need for expensive infrastructure and services (Nepal et al., 2002).

Tourism offers employment and entrepreneurial opportunities for mountain people including portering, petty trade, lodge-keeping and catering. It encourages the development of farming, commercial wood lots and cottage crafts in response to the demand created by tourists. Rising demand for locally produced goods contributes to the strengthening of local economies and livelihoods. Through the implementation of conservation and development programmes that utilise revenues from tourism, it also encourages biodiversity conservation and improvements in the regeneration capability of the environment (Soliva, 2002). Maintenance of cultural and historical monuments, increased pride in cultural identity and resurrection of festivals are some of the positive impacts of tourism on indigenous peoples.

Regional interactions and influences

There is a lack of policies and institutional regulations focusing on the interactions between highland and lowland areas in South Asia. Greater emphasis needs to be placed on these interactions in order to take account of the great differences between highland and lowland areas in production potential and ecological issues. Mountain slopes are more fragile, inaccessible and marginal than fertile lower valleys and plains. On the other hand, the production systems of valleys and plains are often affected by the down-flow of water, soil and nutrients from the fragile and marginal upper slopes. The benefits of flood control, irrigation and soil fertility maintenance via environmental conservation of the mountain slopes are reaped by rich valleys and plains located downstream, while the costs of conservation have to be borne by the people living upstream in marginal areas with low production potential (Müller-Böcker et al., 2001). Mountain populations are often marginalised both by their exclusion from decision-making processes and by being deprived of the benefits of efforts to conserve fragile mountain slopes (Müller-Böcker and Kollmair, 2000). Greater equity might be achieved by implementing a mechanism to share conservation costs and benefits between lowland and highland communities. Concurrently, mechanisms need to be instituted to enable highland communities to actively participate and have a voice in decision-making processes.

8.3.3 Population and livelihood realm

Concern over sustainable livelihoods (Chambers and Conway, 1992; Carney, 1999; Ellis, 1999) was a major issue among the workshop participants. While accelerated global change presents new opportunities for making a living, certain livelihood options have become threatened. Global change can, in some instances, lead to enhanced employment opportunities for marginal peoples, through the expansion of tourism, improved market access and industrial growth.

Population growth

The *State of World Population 2000* (UNFPA, 2000) points out that 23 % of the world's population or around 1.4 billion people live in South Asia (excluding Afghanistan). In the period of 1995–2000 the average population growth rate of the region was 1.8 % per annum, which is higher than the world average of 1.3 % per annum. Population growth in mountain areas such as Nepal, Pakistan and Bhutan tends to be higher than the regional average, which is reflected in the high pressure on limited land and bio-physical resources, together with service provision such as schools and health facilities (UNDP, 2001).



Fig. 5
State-controlled
timber harvesting
in North West
Pakistan.
Photo: U. Geiser

*Unequal access to resources and services:
strengthening livelihood opportunities*

People in marginal areas – particularly those experiencing the syndromes of global change associated with mountain habitats – are faced with poor access to public services such as road transport, health care, education and electrical power. Many of the institutions responsible for service provision in South Asia do not use participatory and consultative approaches and exclude more disadvantaged stakeholders from decision-making processes. Consequentially, the extent of access to resources and livelihood opportunities differs between groups, with the poorest being also the most marginalised. While state law may theoretically provide equal protection to all members of South Asian societies, personal influence and financial position render law discretionary and constrain access of the most disadvantaged to services, resources and livelihood opportunities (Geiser, 2001a,b).

Fig. 6

Agriculture, the main component of livelihood strategy in marginal mountains, still depends on a huge input of manual labour (Annapurna Region, West Nepal).

Photo: H. Kaspar

Food security

The food security of disadvantaged people experiencing syndromes of global change in both rural and urban settings is vulnerable. People living in urban, non-agricultural fragile areas depend on produce from food producing areas. Poverty constrains their access to food, and their food security is vulnerable to market forces. While poverty is a factor influencing access to food in rural agricultural areas as well, nutritional security is also determined by population pressure on land, climatic change and other factors affecting yields, as well as crop spoilage and animal morbidity and mortality (Adhikari and Bohle, 1999).



Migration

Despite the extensive literature on the tradition of migration in South Asia, the understanding of the dynamics of mobility of mountain populations (particularly seasonal labour migration) is poor. Nepal provides a good example of migration presenting both opportunities and problems. Most researchers consider migration to be a proactive strategy in response to poverty and the lack of opportunities in rural and mountainous areas (Blaikie and Coppard, 1998; Blaikie et al., 2002). With the development of transport infrastructure, an increasing number of young males from mountain areas spend increasing periods of time in wage labour in urban areas. While many mountain households depend on remittances to supplement subsistence economy, male migration has also been found to be a process that depletes the subsistence labour force of young, able-bodied males (Seddon et al., 1998). This places an additional burden on women, binding them to the village and reducing the scope of their livelihood options. People migrating from rural to urban areas for work often find themselves trapped in a cycle of low wages and high living costs. This reduces the potential of seasonal migration as a strategy to alleviate poverty in rural households (Campbell, 1997; Miller, 1990).

Whatever the reasons for migration may be, migration has a broad range of immediate and long-term impacts on the migrants as well as on the host communities. These impacts tend to be less than beneficial, an example being the conflicts that often arise between settlers and indigenous people (Weiner, 1978). A prime cause of the economic dislocation of local indigenous peoples is alienation and illegal transfer of land by migrants. On the other hand, land under shifting cultivation fails to enjoy the protection of ownership titles; instead, by classifying such areas as reserve forest, present legislation brings indigenous peoples in conflict with the concerns of nature and biodiversity conservation.

Gender equity and inequity

Despite their socio-economic and political marginalisation, women in South Asia play a primary role in production, especially in subsistence agriculture. Globalisation brings about encroachment upon indigenous female domains, for example through the commercialisation of farming and cottage industries especially in India and Bangladesh. Physical displacement resulting from large-scale logging, dam construction and energy projects has caused an increase in the number of women migrating to cities in search of wage labour. Outside their established domains, under the influence of the hege-

monic culture, women often encounter erosion of their traditional autonomy (Molesworth, 2001), and traditionally female cottage industries are replaced by male-dominated factory production (Rana and Shah, 1987).

Development initiatives, such as the Women's Development Programme (WDP) launched in Nepal in 1981, have led to increased participation of women in development processes. The WDP has been used as a vehicle by multilateral organisations such as UNICEF and UNFPA to address wider aspects of health, education and livelihood development among disadvantaged sectors of society and enhance women's status and opportunities (UNFPA, 1989).

Health

In the syndrome context of mountain areas, as well as for the poor of urban and peri-urban areas in South Asia, access to health services is limited. In remote areas, inadequate provision of facilities and transport constrain access to health care, while the limiting effect of poverty impacts upon the health of both urban and rural poor, who often fail to receive timely diagnosis, quality care or medication. The persistence of high levels of morbidity and mortality among marginalised communities places additional strains on the labour force at the household level, exacerbating situations of high fertility, child labour, illiteracy and poverty (Molesworth, 2001).

Education and empowerment

In South Asia, poor funding and inadequate provision of educational infrastructure negatively influence school attendance and literacy rates. However, poverty and the need for children to contribute to the household economy are also major determinants of these children's access to education, especially in more remote areas.

On the other hand, education is a basic requisite for poor people to develop their economic and social status. NGOs, as alternative institutions to government organisations, have a role to empower marginalised people by providing non-formal and out-of-hours schooling and literacy training for adults and children whose economic responsibilities constrain their access to formal education (Molesworth, 2001).



Fig. 7
Steep and dangerous terrain often hampers the development of infrastructure and the exchange of goods between highlands and lowlands (Kanchenjunga Region, Nepal).
Photo: M. Kollmair

8.3.4 Infrastructure and information realm

Roads

Communications, particularly road communications, are important for the development of marginal and fragile areas. Access to motorised transport has the potential to broaden economic options and is linked to economic development. However, the most remote and disadvantaged members of South Asian societies are often least able to afford motorised transport and benefit from road provision (Molesworth, 2001).

Electrification

People living in fragile areas are often excluded from the benefits of electrification. More remote and poorer populations may not be included in electrification programmes, or they may simply not be able to afford electrical energy.

Information technology

While the rapid development of information technology (IT) has brought new possibilities for global networking, trade and information exchange, poor people living in marginal areas are excluded from these opportunities by their lack of access to IT. Differentials in the extent of access to information technology are linked to unequal opportunities and exclusion from mainstream development and new livelihood options.

The potential of communications

Global networking through travel and electronic communication generates increased awareness of and participation in international trade, activities and human rights processes. It also helps raise awareness of and support for the situation of minority groups, indigenous peoples and disadvantaged groups.

8.3.5 Bio-physical and ecological realm

Degradation of natural resources and increasing vulnerability

Natural resources such as land, water, forests, biodiversity and the visual quality of landscape are essential to the scope of livelihood options, the sustainability of which depends on the utilisation and regenerative capacity of natural resources. Compared with other mountain areas of the world, South Asia's mountain regions have very high human and livestock population densities. In spite of efforts to develop agriculture, the productivity of major

food crops and the reproductive capacity of natural resources are in decline. Efforts to intensify land use through technological interventions such as provision of improved breeds, chemical fertiliser and pesticides have various socio-economic and ecological implications. Although access to these technologies in marginal areas is very limited, their misuse has led to the breakdown of soil structure, increasing its acidity and reducing yields.

Deforestation and degradation of natural resources have adversely affected disadvantaged groups whose economy is based on common property resources. This has increased the work burden of women and children, who usually collect these products. The privatisation of CPR and weakening of traditional resource management systems have led to the overexploitation of certain natural resources, which has compromised sustainable livelihood options and increased vulnerability (Becker and Ostrom, 1995; SDPI, 1995; Kollmair and Müller-Böker, 2002).

8.4 Synopsis and syndrome contexts

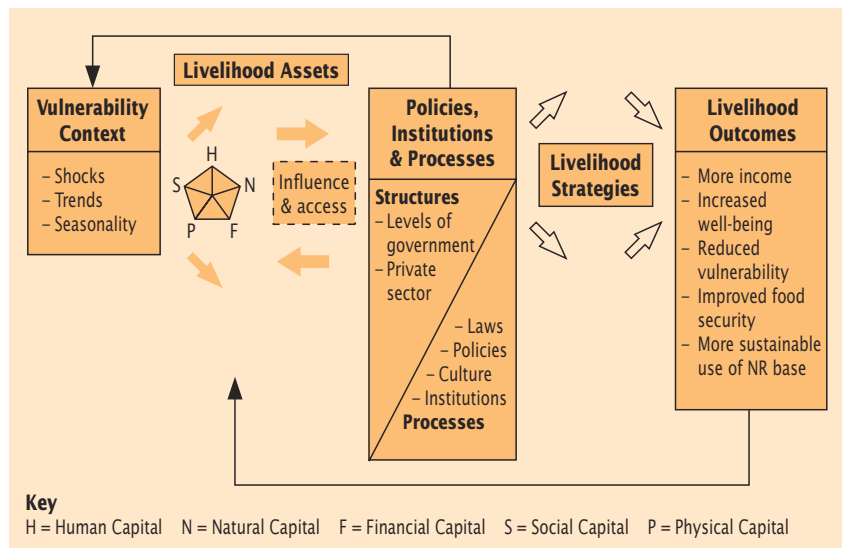
8.4.1 Synopsis

Based on the consolidated list of research priorities, the three working groups were asked where they wanted to place the focus of their activities, keeping in mind their scientific backgrounds and regional contexts.

Within the highland-lowland syndrome context, all participants agreed that they wanted to concentrate research on the development of mitigation strategies for rural livelihoods. This consensus was based on the perception that livelihood sustainability is at stake in marginal and fragile areas, and that indigenous communities are particularly vulnerable.

Fig. 8
The Sustainable
Livelihoods
Framework.

Source:
DFID, 2000



Given the clear focus upon livelihood issues, the Sustainable Livelihoods Framework (Fig. 8) provides a useful tool to structure the outcome of the workshop.

The issue of migration was important for all groups. Labour migration was seen as an important, but risky livelihood strategy that often links highlands

with lowlands or marginal areas with urban and peri-urban syndrome contexts. Although migration has the potential for remittances and entrepreneurial activities, this strategy is embedded in its own problem contexts, such as reducing the labour force in the villages and difficult living conditions in urban slums.

The group focusing on indigenous people regarded migration of settlers into traditionally aboriginal lands to have a negative impact on communities, as it is associated with land alienation. In-migration of “outsiders” is linked to the erosion of livelihood assets, or capitals, of indigenous people, which is another source of social and ethnic conflict. The assets of indigenous people are also negatively affected when communities are relocated, e.g. by government agencies that consider this to be a strategy for nature conservation. As people are often shifted to urban and peri-urban locations, indigenous people are faced with the difficulties of dealing with an alien syndrome context.

Participants highlighted the importance of interventions and institutions (PIPs – policies, institutions and processes) in mitigating syndromes of global change and pointed out the present lack of such PIPs in the region, particularly the poor quality of governance and the lack of effective government support at all levels. Participants dealing with India underscored the problems caused by the weakening of the state in developing countries and the withdrawal of state-run development interventions and welfare programmes. This was regarded to be a direct result of neo-liberalisation and globalisation.

All participants viewed education and empowerment, strengthening of local institutions, participatory mobilisation and decentralisation as particularly important processes with the potential to improve access to livelihood assets and ensure sustainable livelihoods. The establishment of regional cooperative networks and forums for information and employment exchange were considered to be crucial. All groups agreed that research needs to focus on the gender dimension of inequalities in income-generating opportunities (e.g. feminisation of work deprivation).

The potential of improved access to markets was regarded as crucial in providing opportunities for the poor to raise their income. Improved market access would also broaden the range of economic options, facilitating exploitation of niche markets, export of traditional commodities and a market for competitively priced labour.

It was concluded that a core problem for marginalised people lies in poor access to infrastructure, information, resources and services. This has a negative impact on various assets, notably on human capital (including health, education and nutrition) and on natural capital (unequal and contested access to land, water and forest, which in turn is associated with resource degradation). Providing access to global information networks was seen as an important opportunity to overcome the digital divide and lack of access to information and technological innovations.

8.4.2 Syndrome contexts

Highland-lowland interaction

Given the participants' consensus that activities should focus on marginalised people who are excluded from or affected by the mainstream of development, the problems and also the opportunities identified by the three working groups were quite similar. Because many marginal areas are situated in mountain regions, problem clusters may be considered as specific to the highland-lowland syndrome context. However, it became clear that even within the hill and mountain context, local and, most importantly, national circumstances exert strong influences upon livelihoods (e.g. differences in the role of the government and remoteness of particular localities).

Urban and peri-urban

This context was only considered in relation to seasonal labour migration and immigration of people from rural areas. Discussions focused on low-income jobs and the difficulties of coping with poor living conditions in the alien environment of marginal urban settlements.

8.5 Research status and focus

8.5.1 Research needs

Having identified major problems and opportunities, the workshop participants prioritised research needs and defined their research themes and groups (see Minutes of the International Workshop, 2001).

The main conclusions are the following: In the JACS South Asia there is a need for research on the impact of global change and globalisation on marginal areas and marginal people within the “highland-lowland” NCCR syndrome context and – due to its immanent interaction with the former – also the “urban and peri-urban” context. Within selected mountain areas of South Asia, the JACS South Asia will concentrate on marginal or fragile mountain areas, i.e. risk areas with regard to climatic or environmental conditions as well as the economic setting that can be positioned within the highland-lowland context, and on marginalised people.

An entry point of research in selected case study localities is the analysis of rural livelihood strategies aiming to identify key issues supporting or hampering sustainable development. As all participants emphasised migration both as a livelihood strategy and as an impact factor on livelihood assets, research on migration processes will form part of the programme. An understanding of the main processes of state policies and institutions (with reference to the selected themes of resource conservation, resource management and rural development), as well as their implementation and enforcement were regarded as vital in a livelihood analysis. The identification of global influences on selected state policies, implementation mechanisms of these policies, and related markets and economic conditions were also regarded to be important.

In some case studies, research activities will focus on the interface between rural livelihood strategies (including migration) on the one hand, and state policies and institutions on the other, under conditions of globalisation. Special consideration will be given to: (i) the role of local state and intermediary organisations, (ii) the role of local skills and knowledge, and (iii) the gender dimension.

8.5.2 Research contribution by members of the JACS research teams

Having identified the overall research priorities, each of the JACS research teams defined their planned research contributions. These are summarised in Table 8.

Nepal Research Group – highland-lowland and peri-urban contexts (within IP6):

This group's core theme is the analysis of the following three institutional fields and their role in, and relations with, marginal people's livelihoods:

- International labour migration and rural livelihoods: Field studies concentrate on Nepalese migrants in Delhi on the one hand, and on returnees and families remaining in Nepalese villages on the other hand. Specific attention is given to the analysis of the “transnational social space” created by these migration processes, i.e. credit systems, remittance transfer and job networks.
- The effects of nature conservation on rural livelihoods: These studies address the impacts of globalised institutional arrangements regarding nature and natural resource conservation in a local context.
- Livelihoods of marginal communities in peri-urban areas.

Pakistan Research Group – highland-lowland interaction context (within IP6):

The Pakistan Research Group's core theme is to test the hypothesis that increased participation and decentralisation contribute positively to livelihoods and natural resource management (specifically forests). Overview

Table 8

Research groups and umbrella themes.	Research group	Umbrella theme
	Nepal	Livelihood sustainability in marginal areas
	Pakistan	The impact of participation and the devolution of power on natural resource utilisation and livelihood security
	Kerala	Coping strategies in the Western Ghats: Threats and opportunities of economic globalisation and state decentralisation
	India/macro	Economic growth and poverty reduction in India: Effectiveness and efficiency of economic and social policies of the central government and the states
	NE India and Bangladesh (within IP7)	Comparative study on conflict relations between settlers and indigenous peoples
	India/urban (within IP8)	Gender, governance and environment in urban contexts of India

studies are being carried out to understand the present situation of the political decentralisation programme initiated under the Military Government, the status of forest management and the legal context of (donor-driven) trends towards joint forest management. In-depth case studies are planned to analyse the realities at field level.

Kerala Research Group – highland-lowland context (within IP6):

This group's core theme is the impact of globalisation on livelihoods in the marginal regions of the Western Ghats. Studies focus on the livelihoods of marginalised rural people and address the following specific issues:

- Impact of commercialisation on marginal groups.
- Market-induced changes in small-scale coir industries and their effects on marginal people's livelihoods.
- Changing prices in selected cash crops (particularly rubber) and the question of how marginal people cope with these changes.

India Macro Research Group (within IP6):

The goal of this group's project is to analyse the effectiveness and efficiency of economic and social policies in fostering economic growth and reducing poverty in India. Various dimensions of governance will be included in the analysis as much as possible. Economic and social policies of both the central government and state governments, as well as their impact on the livelihood of poor households, will be analysed. Due to data limitations, the analysis of policy impacts on livelihood will focus on linkages between policies and poverty (head count ratio) as measured by India's official poverty line. Poverty data have been collected since 1950 within India's National Statistical Survey (NSS) rounds.

NE India and Bangladesh Research Group – highland-lowland context (within IP7):

The IP7 sub-project "frontiers" works in the context of highland-lowland interaction. It investigates the nature and causes of conflicts between indigenous people and settlers in "frontier" areas of South and South East Asia, and develops strategies for their resolution. It entails field studies in four locations in the JACS South Asia:

- Assam, Kokrajhar District (North East India).
- Assam, Nagaon and Karbi Anglong Districts (North East India).
- Arunachal Pradesh (North East India).
- Chittagong Hill Tracts (Bangladesh).

India Urban Research Group (within IP8):

The core question of this project is to analyse whether the decentralisation process has increased women's opportunities to voice their interests, and whether it has increased state accountability towards women, especially in public services and environmental management.

**8.5.3 Institutional set-up for research
in the JACS South Asia**

Coordination

Coordination of NCCR research in the JACS South Asia is within IP6 (Development Study Group, Department of Geography, University of Zurich, Switzerland). In its 4-Year Plan and 1-Year Plans, IP6 has defined one Activity Line specifically for this purpose. Appropriate arrangements for research coordination, planning, administration, monitoring and reporting are being defined.

JACS Secretariat

IP6 has established a JACS Secretariat in Nepal called "NCCR South Asia Office" (Ekanatakuna, Jawalakhel, G.P.O. Box 910, Kathmandu, Nepal, nccr@wlink.com.np).

Table 9

IP	Group Name	Partner Institution	Link Institution in the North
IP6	Nepal Research Group	Central Department of Geography (CDG), Tribhuvan University, Kathmandu Nepal Institute of Development Studies (NIDS)	Development Study Group, Department of Geography, University of Zurich
IP6	Pakistan Research Group	SDPI (Sustainable Development Policy Institute), Islamabad Journalists for Democracy and Human Rights (JDHR), Islamabad	Development Study Group, Department of Geography, University of Zurich
IP6	Kerala Research Group	Centre for Development Studies (CDS), Thiruvananthapuram, Kerala	Development Study Group, Department of Geography, University of Zurich
IP6	India Macro Research Group	Institute of Economic Growth, Delhi School of Economics Gujarat Institute of Development Research, Ahmedabad	Post-Graduate Course on Developing Countries (NADEL), Swiss Federal Institute of Technology, Zurich
IP7	NE India Research Group	Department of Sociology, North-eastern Hill University, Shillong, Meghalaya Department of Sociology, Delhi School of Economics	Department of Social Anthropology (ESUZ), University of Zurich
IP7	Bangladesh Research Group	Department of Sociology, University of Dhaka	Department of Social Anthropology (ESUZ), University of Zurich
IP8	India Urban Research Group	Details to follow	Graduate Institute of Development Studies (IUED), University of Geneva

Research teams in
the JACS South
Asia (status May
2003)

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